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Date of Signature and Deposit: July 24, 2007

Sara D. Vinarov

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Thomas P. Zwaka
James A. Thomson

Date: July 24, 2007

Serial No.: 10/774,122

Group Art Unit: 1633

Filed: 02/06/2004

Examiner: Maria Marvich

Title: DIRECTED GENETIC MODIFICATIONS
OF HUMAN STEM CELLS

File No.: 960296.99021

Confirmation No.: 8384

SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner For Patents
P. O. Box 1450
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Dear Sir:

Enclosed is a completed Form PTO-1449 listing additional documents that the applicants in the above-identified application wish to bring to the attention of the Examiner for consideration in connection with the examination on the merits of this application.

A fee in the amount of \$180.00 is believed to be due. Please charge this fee to Deposit Account No. 17-0055.

Respectfully submitted,

Sara D. Vinarov 07/31/2007 AHMAD1 00000012-170055 10774122
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Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 2

Complete if Known

| | |
|------------------------|---------------|
| Application Number | 10/774,122 |
| Filing Date | 02/06/2004 |
| First Named Inventor | Thomas Zwaka |
| Art Unit | 1633 |
| Examiner Name | Maria Marvich |
| Attorney Docket Number | 960296.99021 |

U. S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

| FOREIGN PATENT DOCUMENTS | | | | | | |
|--------------------------|-----------------------|---|--------------------------------|--|---|---|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear | T |
| | | Country Code ³ -Number ⁴ -Kind Code ⁵ (if known) | | | | |
| | | WO 93/04169 | 03/04/1993 | Berns et al. | | |
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| Substitute for form 1449/PTO | | | | Complete if Known | |
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| | | | | First Named Inventor | Thomas Zwaka |
| | | | | Art Unit | 1633 |
| | | | | Examiner Name | Maria Marvich |
| Sheet | 2 | of | 2 | Attorney Docket Number | |
| 960296.99021 | | | | | |

| OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS | | | | | | |
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| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | | | | T ² |
| | | MARCHIONE, M., "Scientists swap genes in human stem cells," Milwaukee Journal Sentinel February 1, 2003 | | | | |
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| | | VASQUEZ, K.M., et al., "Manipulating the mammalian genome by homologous recombination," PNAS 98:8403-9410 (2001) | | | | |
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